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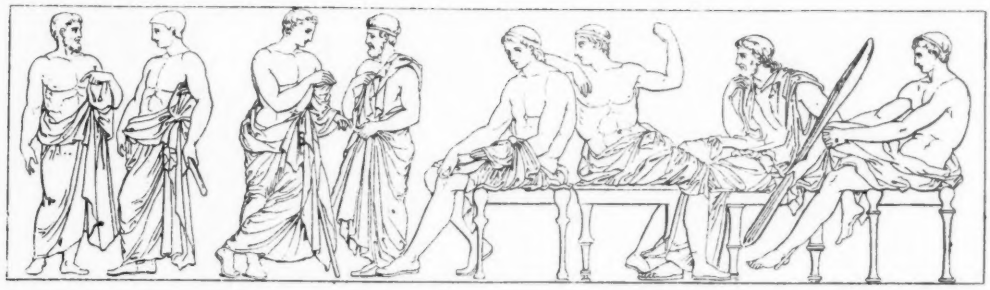


A Note on Architectural Training in the Past, with Special Reference to England *

BY PAUL WATERHOUSE, M.A., F.S.A., PAST PRESIDENT R.I.B.A., PAST CHAIRMAN OF THE BOARD OF ARCHITECTURAL EDUCATION.

I.

THE WAYS OF THE ANCIENTS

I SUPPOSE that the earliest intimation we have about the education of architects lies in the list which Vitruvius gives of the things an architect ought to know. There is more in that list than we expect from architects to-day, and there is nothing missing except ferro-concrete. Let us suppose that there was such a person as Vitruvius, which I believe, and that his writings date from the Augustan age, which I also believe: how, I ask, was the perfect architect of Vitruvius' imagination to acquire the knowledge which the author calls upon him to show? Presumably not in any one school of architectural training, but by separate courses in academies of letters, draughtsmanship, geometry, history, philosophy, music, medicine, law, astronomy and meteorology.

That schools of all these kinds existed in Rome is probable; but if we are to judge of all classes of education by Quintilian's charming book on the training of young orators, it is likely enough that no Roman boy ever would have got his A.R.I.B.A. while Vitruvius was chairman of the Board of Examiners. We are left to the conclusion that in the first century of our era the problem of architectural education *solvebatur ambulando*, that it was one of those puzzles which, as they said of the affair of Achilles and the tortoise, could only be solved by practical proof on the running track.

Yet not by pedestrianism only, for the architect is midway between the things that walk and the things that fly. His wings as well as his feet have to be trained, and he is not a perfect Pegasus until by fluttering and stumbling his course is at least partly finished.

I greatly suspect that the architect of the Augustan age (flinching from the full Vitruvian curriculum) learnt his craft on the same lines that have probably prevailed from the year zero to the opening of the present century.

That the process changed I have no doubt whatever, but in the main I feel sure that the one abiding principle in the training of the architect, whether in a guild of masons or in a monastery, whether in mediæval times or in the days of post-Reformation practice, was contact in a subordinate capacity with some man whose independent status as a designer was already won. To call this condition of ripening, pupilage, is unduly to narrow the multifarious forms of the process. It must have been throughout the ages of ever varying character. In some cases the learner may have been one of a crowd of subordinates under one master, in others he may have been a right-hand man under a single teacher; again, he may have gone from one *magister* to another. Sometimes he learnt by precept, oftener by example, and always he must have profited more by his own mistakes than by the successes of his guide. The practical side of architecture, says Vitruvius (in a fairly corrupt passage), is a prolonged and hard-worn contemplation of experience perfected by manual contact with material in relation both to the nature of that material and to its purpose.

Now, since experience (which is success through failure) and head-knowledge (which is a slow process

* A Paper read at the International Congress on Architectural Education on 29 July.

of advance from ignorance) are the necessary elements of architectural equipment, it is obvious that the failures and the ignorance must not be entirely practised at the expense of those who pay for our designs. The ignorance can, it is true, be overcome by book-learning and other teaching, so that, as far as that side of an architect's panoply is concerned, he might in certain favourable circumstances be made the perfect designer before he was exposed to the risks of practice. But the experience—the other department of his training—can only be won in the field of actual performance; and it would appear that there is only one way in which the school of initial experience can be made use of without casting upon the employer the inevitable cost of inevitable but useful blunders. That way is by taking care that the young man's first essays in courage are made under the control of another's responsibility, so that as far as possible the mistakes may be checked before they have matured into costly errors.

There are many reasons why—whatever be the methods of refining education in craft—the ancient system of learning by being a practising junior under a practising senior should never be left out of account.

Systematised academic training in architecture is a product of the last hundred years at most. Its history is very interesting. It has been rapid in growth and successful in results. Those who deal after me with the present and the future will have more to say of it than I can allow myself to say here, and if I seem in this paper to ignore it, my reason is not that I think ill of it. How could I? As one who sat on the Reconstruction Committee of the Architectural Association, as a past chairman of the Board of Education, as an examiner in the early days of the three-grade system, and as a present external examiner of five schools, I can hardly feel myself anything but an ardent promoter of our modern methods. But, with all my enthusiasm for academic schooling, I am surely aware that there is no school but experience that makes a man safe in architecture—and by safe I imply, not merely able to build what will defy gravitation and weather, but sure of being able to produce what he is able to draw.

Experience can only be gained by working as an architect on actual buildings. For these buildings someone must be responsible. Happy and few are the beginners who can shoulder responsibility alone without first practising on a responsibility shared.

II.

THE DAYS OF THE GIANTS

And now to go back in time. How little we know of the training of the great men of even the seventeenth century! The giant Wren is of no use to us as a historical evidence. In architecture, as in other aspects of his remarkable life, he was his own disciple. Already matured as a man of science, he was invited by those who trusted his almost universal powers to make a trial in practical architecture at both of the great universities. The Chapel of Pembroke College at Cambridge, and the Sheldonian Theatre at Oxford, are, whatever their faults, miraculous "first jobs" for any man to have achieved. They would be more than miraculous if we did not consider the character of Wren and the character of his age.

To the first we owe his marvellous powers in construction. Wren was an all-round scientist, and to such a man the problem of defying gravity by the arrangement of material—which is the simplest definition of building construction—was child's play. As to the second, we must remember that the period of classic study was in full swing. Great as he was in science, Wren was also great in classic lore; and to the politely cultured gentleman of the latter half of the seventeenth century the knowledge of classic art, no less than the knowledge of the classic tongues, was an article of his equipment.

Between Wotton in Elizabeth's time and Dean Aldrich in Anne's, we may imagine a chain of unprofessional *conoscenti* to whom an intelligent interest in classic architecture was even commoner than a smattering of half-forgotten fourth-form Latin is among the country gentlemen of to-day.

With the eighteenth century—and, indeed, with Wren, Gibbs and Inigo Jones—there came in, what is an intensely important factor, the belief that without some study of classic and Renaissance art on Greek, Roman, Italian, or French soil no architect could be completely equipped. In saying this we have to assert that during half the seventeenth and all the eighteenth centuries foreign travel and foreign study were an essential in the training of the polite architect. How could it be otherwise, and how, again, could it fail to be the case that the immense vigour displayed during the nineteenth century in reproducing by engraving, and later by photography, the works of non-Britannic architecture should have enabled men, to whom extensive foreign travel was impossible, to make themselves masters of the work of other countries and of far distant dates?

Inigo Jones, as we know, went to Italy and France for the study of landscape painting; he returned complete with the panoply of a classic architect. Wren, after being plunged almost unexpectedly into the responsibility of architecture, took a well-timed and a well-employed rush to Paris. That Wren was learning all his life is well illustrated by a comparison of his earliest and his executed designs for St. Paul's. Robert Adam, the eldest and best of the celebrated Brethren, though he had an architect as his father, lost him at the age of twenty, and, considering that the young man's education was a general training at the

University of Edinburgh, it is marvellous that at the age of 34 he should be found returning to the British Isles to find himself appointed architect to the King and Queen, having during his absence been elected F.R.S. and F.S.A. Where had he been that, having been born in 1754, he should find himself an Aston Webb in 1762 ? He had been measuring and drawing the palace of Diocletian at Spalato on the Adriatic, and had also been under the guidance of the French architect, Clérisseau.

Take with me a look at Sir William Chambers, an acknowledged giant. How was he trained ? At 16 he, so to speak, ran away to sea, and for two years he lived a rather menial sailor's life, tempered, it is true, by a tendency to sketch Chinese architecture. This tempering and this tendency led him to realise his vocation, and his next outbreak was in the direction of Italy—to study architecture.

Here was a case of a man beginning straight away, so to speak, by the fine process of actual and personal gleaning of the authentic facts of classic lore. There was no " Chambers " for Chambers, much less a Mauch. At 29 he was in what they called in those days an assured position. He, too, while abroad had a touch of Clérisseau.

I suspect Clérisseau of being the spiritual father of the Architectural Association.

If anything in the life of a Scot were ever accidental I should describe the beginning of James Gibbs as singularly blessed by the chances of fortune. After taking his degree at the Marichal College at Aberdeen he lost his parents and sought his fortune abroad. Holland was the country chosen. In Holland naturally he finds a countryman, no less a person than John Erskine, Earl of Mar, who sends him with money and introductions to the great Fontana at Rome. Thus was Gibbs provided with the equipment of which he made such brilliant use.

Sir William Tite, to take an example not essentially gigantesque from among the Presidents of the Royal Institute of British Architects, was, as regards his training, more nearly of the pupilage type. He was articled to D. Laing, the architect of the Custom House. When was his journey to Italy ? It came apparently, after being long deferred, when a serious illness at the age of 53 induced him to give up architecture in favour of a career as a member of Parliament, a director of a City bank, and a magistrate in two counties.

Of Sir John Soane as a factor in architectural education I can only speak with the highest respect.

A glance at the very interesting monograph on the subject of his office as a pupil-room, compiled by my friend Mr. Arthur Bolton, shows us to the full how intensive was the training then afforded.

Between the years 1784 and 1837 no less than 55 men passed through his atelier in one capacity or another. Thirty of these were genuine pupils: the rest were assistants or improvers.

The greatest of them were, I suppose, Basevi, the architect of the Fitzwilliam Museum at Cambridge; Gandy, an assistant, who became A.R.A.; and D. Laing, who, as before mentioned, was Tite's instructor.

Soane himself had no special chances in education. It was as an office boy that he went to Dance the younger, and he subsequently entered, presumably as an assistant, the office of Henry Holland, where he stayed till he was 23. Holland deserves to be better remembered than he is. His Royal Palace, Carlton House, is, of course, destroyed, but he did at least leave us the front of Brooks's in Pall Mall. Soane may have learnt much at Holland's. He probably learnt more in his journey abroad, which came as a sequel to his winning in 1776 the gold medal of the Royal Academy. Soane's connection with the Academy is a great fact in his own educational treatment of his pupils, and, indeed, in the history of architectural education. In 1806 Soane succeeded his old master, Dance, as professor of architecture at the Royal Academy. His very beautiful drawings made to illustrate these lectures were prepared in his own office, and it is not too much to say that the production of these drawings formed a valuable part of the training provided for his pupils. It is interesting that during the 53 years of the height of Soane's practice no less than 357 architectural studies were admitted to the Royal Academy exhibitions from Soane's office staff under their own names.

Soane gave his pupils plenty of practical work, including surveying, measuring, costing and superintendence, as well as the making of working drawings. But he also, it is clear, established a brilliant academy of fine draughtsmanship.

Probably, with about three possible exceptions, no architect since his time has ever provided in his own office—and that a busy office—such a complete or refined education for pupils.

I have mentioned Soane's work as a teacher and lecturer at the Royal Academy; the Royal Academy itself must not be forgotten as a factor in the general movement towards architectural training.

Founded, as we know, in 1768, it had, I suppose, from the first some intentions of giving teaching in architecture, but how far there was organised instruction in the earliest years I cannot be sure. That it was giving a gold medal in 1776 we know from Soane's own case. But to what extent was there a school or an instructor ? It may be that Soane was the first professor of architecture to take himself and his office seriously, for we know that his predecessor in office, George Dance the younger, though he held the post for several years, never gave a lecture. As Dance was one of the original members of the Academy,

this fact ranks as a rather remarkable instance of early development in sinecure.

III.

THE PRAISE OF OUR FATHERS

What pupilage was in the days of Queen Victoria most of us know by tradition, repute or experience. That it differed enormously between office and office there can be no doubt. That in some cases it was a farce is, I am afraid, true; that in many it was a very glorious discipleship is equally and honourably true. In all cases the amount of learning to be gained from it must have varied not only with the character of the master, but also with the opportunities which the master's clients provided. If a leisured office gave the master the best opportunity of individual teaching, a busy office probably afforded, by the brisk friction of stirring practice, the most animated encouragement.

Be that as it may, we have amongst us at this time survivors of the Victorian training whose work and whose character testify to the force of those training grounds not less clearly than do their spoken reminiscences of the great men of our fathers' time.

If I have not spoken of the establishment of the examination system of our Royal Institute it is not because I ignore its importance, but for the simpler reason that I regard it not so much as a portion of the past but rather as the birth of the present.

What the Institute did at the close of the last century in setting up first the tentative voluntary examination, next the obligatory, and finally the three-fold system was nothing more or less than to force and to foster the bands of the new race of educators.

The parallel growth of the Architectural Association as a teaching body and the gradually increasing efficiency of the classes under professional guidance at University College, King's College, and South Kensington worked together for good in the same direction and became with one other force the irresistible origins of our present system.

That one other force—one easily forgotten but not lightly to be ignored—was the cheerful willingness of the senior architects of those days to hand over to schools and classes the young men who, to speak quite plainly, had been a fruitful source of revenue in premiums and sometimes of most valuable office help occasionally unpaid or underpaid.

In a closing survey let us learn and remember one or two things which are of real importance to the study of this really great subject.

The present system of academic instruction is not really a break with the past.

It seldom happens that a school student finds himself at the end of his course in sole command of an immediate practice. As often as not his career as a graduate in architecture begins or continues in a draughtsmanship. As an assistant he will experience that happy comradeship with an elder which the abolition of pupilage might have seemed to extinguish.

And here another point. Friendly rivalry among fellow students has been and always will be one of the greatest incentives to progress. This is the reason why a large office full of pupils was in the Victorian days a better training ground than a small one, unless, as sometimes happened, there were enough to make up two good sides at stump cricket or passage football.

The schools provide this rivalry to perfection, and thus give by their very nature what under office pupilage could only come by chance.

Finally, a very interesting consideration. We have seen that in the days of the eighteenth and for half of the nineteenth century foreign travel was an almost invariable prelude to successful cultured practice. How great an enterprise that travel might be I know from the mouth of my own father and from the evidence of his sketch-books.

What was the object of that travel? Sometimes, as in the case of Robert Adam's visit to the Adriatic, it was actual discovery: the digging out for oneself of architectural facts which no book-learning in England could supply. Sometimes it was the mere seeing for oneself of the grandeur which no record, no drawing, no picture can transfer. Always it was that contact with masterpieces which means awe, delight and possession.

To-day the knowledge of every accepted work of art is accessible by means of books, photographic illustrations, and measured drawings. The scope of an architect's study of the past is to-day wider than ever and more rapidly achieved. Our debt to the men who have reduced to black-and-white documents the information which of old had to be sought by travel is immense. But the letter killeth; and it is a happy reflection that no learners of architecture and no teachers can avoid the discovery that actual personal vision of buildings is indispensable to the appreciation of what architecture is and means.

Quite apart from the fact—a most important and pregnant fact—that drawing from a building, if conscientiously done, is the finest and deepest form of study, there remains the wonderful realisation that the presence of perfect architecture has upon the architect a direct, a magic, an inspiring influence which, like that of love, no learning can explain and no logic can deny.

Let us talk, as we must, of the future of architectural teaching, but let us never forget that the greatest teaching force of all is the voice of those who "being dead yet speak."

Aspects of Houses in Relation to Wind, Rainfall and Sunshine

BY NATHANIEL LLOYD, O.B.E.

THE question, "What is the best aspect for a house?" has been asked many times, and invariably answered in accordance with the taste or prejudice of the person replying. Houses have been placed on sites in accordance with the fashion of their times, or with supposed advantages in health and enjoyment, but subject to modifications dictated by the slope of ground or other characteristics of particular sites. The mediæval house almost invariably faced towards the north, seldom due north, but more frequently north-east than north-west.* Those early writers who concerned themselves with such matters were emphatic in denunciation of southerly aspects and in praise of those facing north. That a south aspect breeds sickness we no longer believe, but while a northerly prospect has the advantage of objects being lighted by the sun from behind the observer, and so appearing with greater charm than when viewed under the light, few would now choose that aspect. Except that, in a vague way, choice of aspect is now dictated by desire to secure as much sunshine as possible, quite irrespective of the quality of the sunshine or of the time of day at which it will enter rooms, the choice is made in what can only be called haphazard fashion without either scientific or logical reasons. Due south appears to be the favourite aspect, after that south-west and, less often, south-east. South, however, is reigning favourite, generally without allowance being made for variation in conditions in different parts of the country. It is proposed to consider the influences of wind, rainfall and sunshine as affecting that front of a house which we often style the garden front, in which the architect strives to place as many as possible of his living rooms and bedrooms. It is this elevation and not that by which the house is entered to which I shall refer as the "front." Other matters (such as configuration of ground surface) affecting placing on the site are outside the scope of the present enquiry.

Wind.—There was a time when a site was chosen for a house for the sake of the shelter it afforded and when, except for outlook or strategic reasons, no one placed a house in an exposed position. Now, we prefer an open aspect for the sake of its freshness and for the prospect it affords; consequently the direction from which storms usually come must be taken into account. Discomforts proceeding from stormy aspects are (1) draughty rooms, which are especially distressing in cold weather, (2) difficulties of ventilation (draughts low down do not necessarily imply effective ventilation of the upper part of a room) by the only means usually available—an open window. This is particularly troublesome in respect of bedrooms. Most of us sleep with open windows and we all know the discomfort of these when exposed to storms, and particularly the unpleasant experience of having to rise in the night to shut a window through which a sudden storm drives heavy rain into the apartment.

Rain.—Another effect of rain driving against windows is utterly to destroy that prospect for which they were designed. Whether only spotted by raindrops from a shower or fine, misty rain or streaming with wet from a downpour, the occupants of a room are as effectually shut off from seeing outdoors as if in a prison. On the other hand, the view from a sheltered window is a great resource for the storm-bound. No grander scene is provided for us by nature than the passing of the storm, and even the uncompromisingly wet day has its driving clouds, its squalls of rain, its pools, its reflections and all the other features of which the "butterfly" observer is totally unconscious, but which are certainly worthy of consideration when placing the house.

Sunshine.—The instinct to secure ample sunshine is not only natural, but is essentially right. It is not to be obtained, however, by dumping the house down in accordance with the fashion of the moment. There are seasons in this country when rooms and houses may be almost intolerable from excess of sunshine. Even when sun is scantiest, the hour factor or time of day and its occupations should be considered. There is no happier beginning to the day than to rise, dress and breakfast bathed in sunshine, which cannot best be secured by the adoption of the south aspect. Perhaps this is the most important factor in relation to enjoyment of winter sunshine. Few remain in the house after ten o'clock, if sun shines, and such persons would naturally prefer the house to receive the best of the sunshine, whilst they are in it rather than after they leave it. The tables showing expectation of sunshine at each hour for each month should be used with this point in mind, but most of the records indicate more bright sunshine in the morning than in the afternoon. A gardener, from his practical experience, would claim even greater virtue for the morning sun, which he finds more beneficial to his plants than that of the afternoon.

* "Ordre and edyfy the house so that the pryncipale and chefe prospectes may be eest and weest, specially north-eest. South-eest and south-weest for the meryal of al wyndes is the moste worste, for the south wynde doth corrupt and doth mtke evyll vapours: wherefore, better it is of the two worste that the wyndowes do open playne north than playne south." Andrew Borde, physician and traveller, 1490?–1549.

The following table shows the percentage of rainfall throughout the year, with each direction of wind at four stations. These are averages of records taken during the ten years 1901–10.*

Wind	Richmond	Falmouth	Aberdeen	Cahirciveen
N.	8	8	8	4
N.E.	7	3	9	3
E.	9	5	10	5
S.E.	7	10	20	20
S.	20	21	17	35
S.W.	22	28	6	15
W.	10	11	6	8
N.W.	6	8	15	5
Calm	11	6	9	5

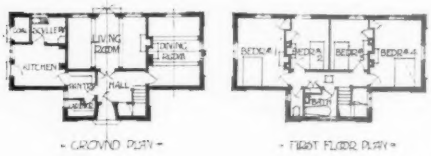
As it will be found that the relation of rainfall to wind varies, not only geographically, but as affected by purely local features, the following notes respecting the above stations are necessary.

Kew Observatory is in the Old Deer Park, Richmond, adjoining Kew Gardens. The site lies low, and Richmond Hill, to the south-west, rises only 150 feet.

Falmouth Observatory is near the harbour entrance, open to the Channel on the east, south-east, and south. To the west and north-west the land rises to 700 feet at nine miles distance.

Aberdeen Observatory is open to the sea to north, east and south. The Don valley runs north-west, the Dee valley south-west from the Observatory. To west and west-south-west the land rises to the summits of the Cairngorms, fifty miles away, which effectually tap the westerly raineloud. Apart from these, as an East Coast station, south-east would be a rainy quarter.

Valentia is an old-established station moved three miles to Cahirciveen in 1892. It is open to the south and west; to the south-east are hills rising to 1,600 feet; other hills run north-east to south-west, one or two miles east of the Observatory; north-east to south-east are the Macgillicuddy Reeks, rising to 2,000 feet, ten to fourteen miles away; to south-west are isolated hills of 1,000 feet, eight miles away.



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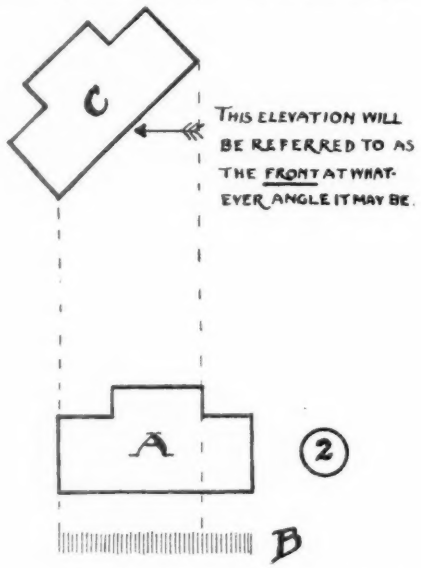
Eskdalemuir (from which sunshine records only are drawn) differs from the other observatories in its situation 800 feet above mean sea level.

In order to compare these records a block plan of a house is shown facing a different aspect in each diagram. The house plan this represents is one for a small house by Mr. C. W. F. Dening, F.R.I.B.A., which was awarded the first prize in a competition promoted by *Country Life*. In it the living rooms

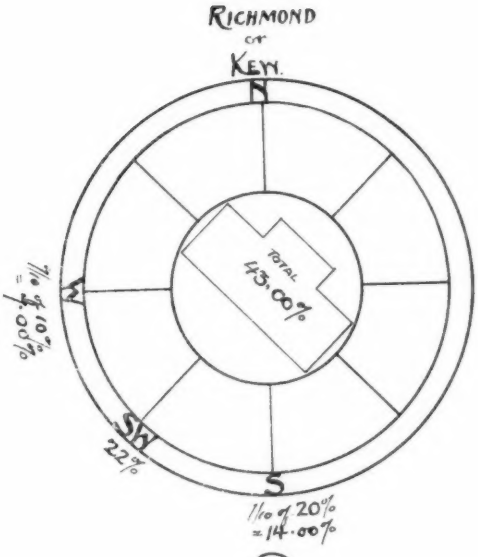


and all the bedrooms face south. The plans of ground and first floors are shown in diagram No. 1.

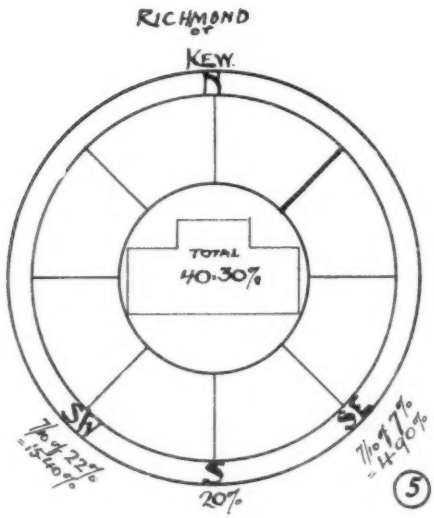
A little reflection will make it apparent that a house facing south will receive rain driving from south-west and south-east as well as from south, but, as will be seen from diagram No. 2, the whole of similar rainfall from these quarters would not strike the south elevation. If A represents the building with its principal elevation facing south, and B the rain which will strike upon that elevation, it is clear that by turning the elevation 45 degrees to face south-east, a smaller amount of that rain will strike it with a south wind; in fact only 7/10ths. Thus a frontage of 40 feet to a south wind becomes equal to and receives only the rainfall of 28 feet when turned to south-east. The application of this factor is shown in diagram No. 3, where the proportions of rain received from each direction of wind upon the south elevation are indicated.

Applying this method to south-west, south, south-east and east aspects, as in diagrams Nos. 4, 5, 6, and 7, we find the records at Richmond show that the wettest aspect is south-west, with 43 per cent., that south is next with 40·30 per cent., that south-east receives 27·30 per cent., and that east only gets 18·80 per cent., or much less than half the amount of rain received by south-west or south.

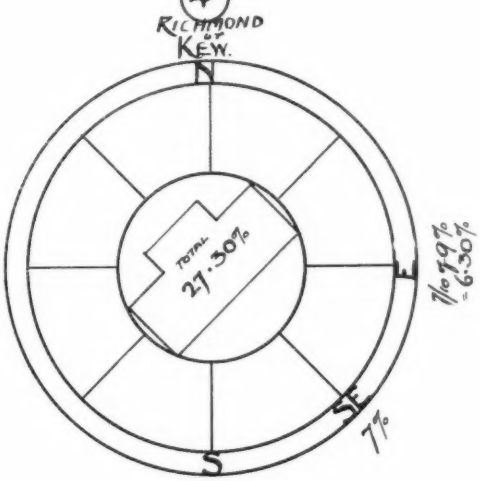
* *The Relation between Wind Direction and Rainfall*, by H. J. Bartlett, from the Quarterly Journal of the Royal Meteorological Society, Vol. XL. No. 172.


RICHMOND
OR
KEW.
N
TOTAL
45.00%
SW
22%
S
1/10 of 20%
=14.00%
1/10 of 10%
=10.00%

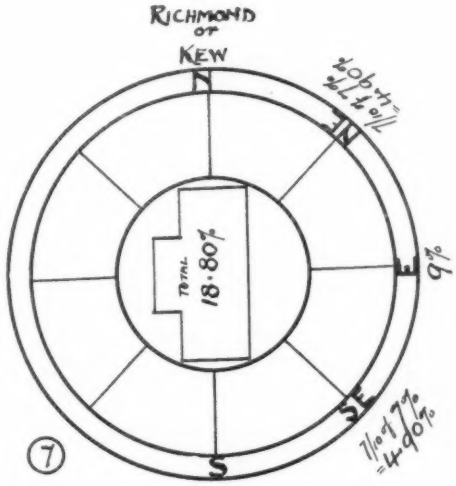
4


RICHMOND
OR
KEW.
N
TOTAL
40.30%
SW
7/10 of 22%
=15.40%
S
20%
SE
7/10 of 7%
=4.90%

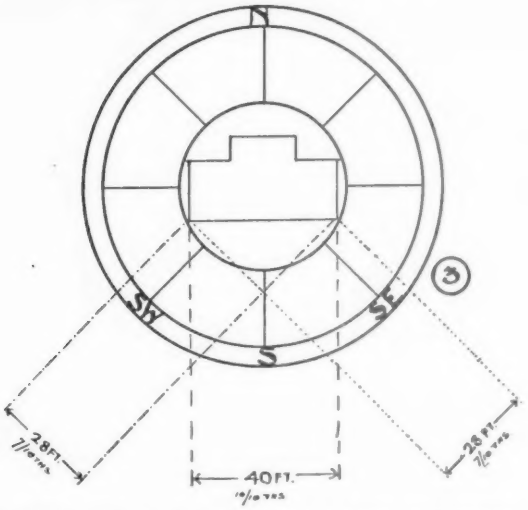
5


RICHMOND
OR
KEW.
N
TOTAL
27.30%
E
9/10 of 7%
=6.30%
SE
7%
S
7/10 of 20%
=14.00%

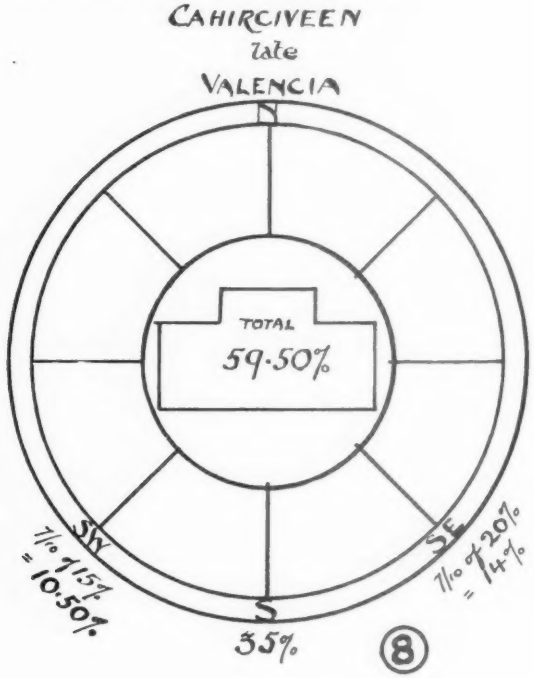
6


RICHMOND
OR
KEW
N
NE
7/10 of 7%
=4.90%
TOTAL
18.80%
E
9%
SE
7/10 of 7%
=4.90%
S

7



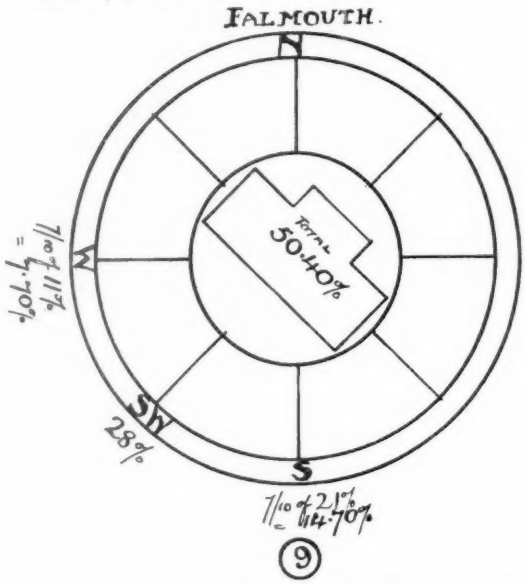
Cahirciveen, as might be expected from its situation, shows excessive rain from the south, for which diagram No. 8 is given below. It may be noted that 70 per cent. of the rainfall received at this station comes from south, south-west and south-east.



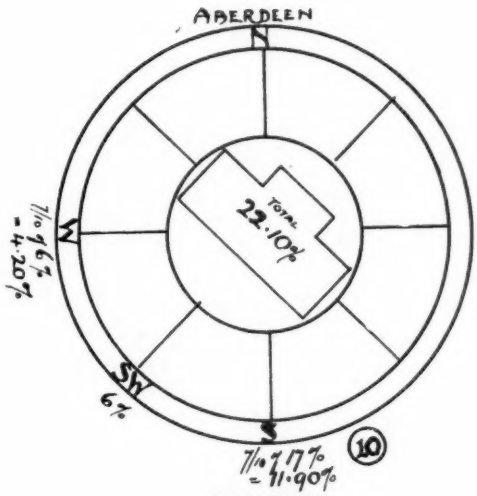
Similar figures for other aspects are :—
South-west, 45·10 inches.
South-east, 48·00 inches.
East, 21·10 inches.

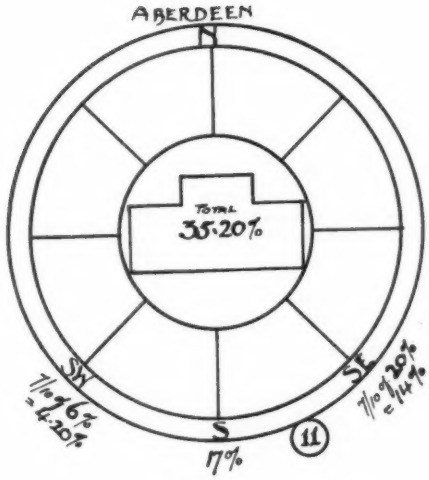
The figures for Falmouth show larger percentages for all southerly aspects, and the increased percentage from south-west is particularly significant. Diagram No. 9 shows the effect of these and that a south-west aspect would receive more than half the total rainfall of the station.

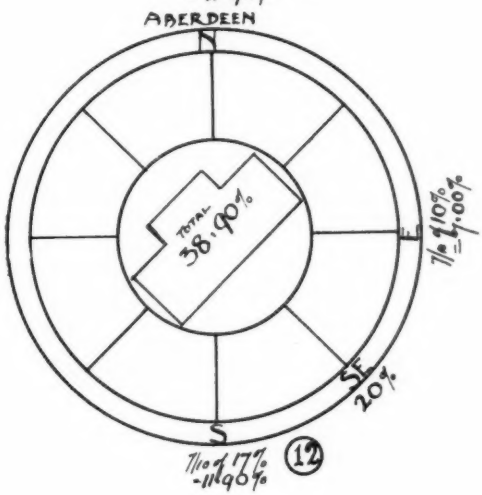
Similar figures for other aspects are :—
South, 49·60 inches.
South-east, 28·20 inches.
East, 14·10 inches.

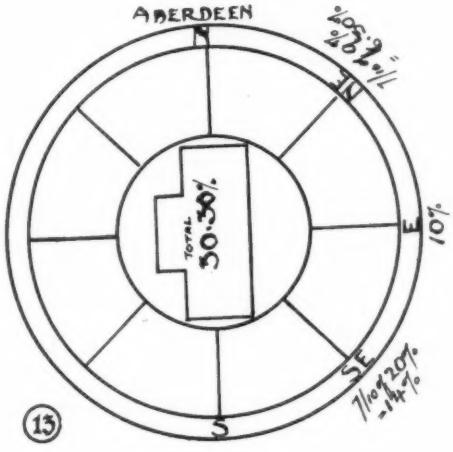


The figures for Falmouth do not differ materially, except in degree, from those for Richmond. There are, however, other stations where records of rain-bearing winds show very different results. One of these is Aberdeen, which, partly owing to its situation on the East Coast and partly to its position in relation to the Dee and Don valleys, receives most rain with south-east wind. Diagrams 10, 11, 12 and 13 show records applied to four aspects. The driest is south-west, with 22·10 per cent. rainfall, compared with 43·00 per cent. at Richmond and 50·40 per cent. at Falmouth for the same aspect. In fact, the driest aspect at Aberdeen is the wettest at the other two stations. Obviously, from the rainfall point of view, aspect should be varied according to locality. Other factors, however, must be considered.


ABERDEEN
N
W
SW
S
TOTAL
22.10%
6%
7/10 7.17%
= 11.90%
7/10 6.73%
= 4.20%
10

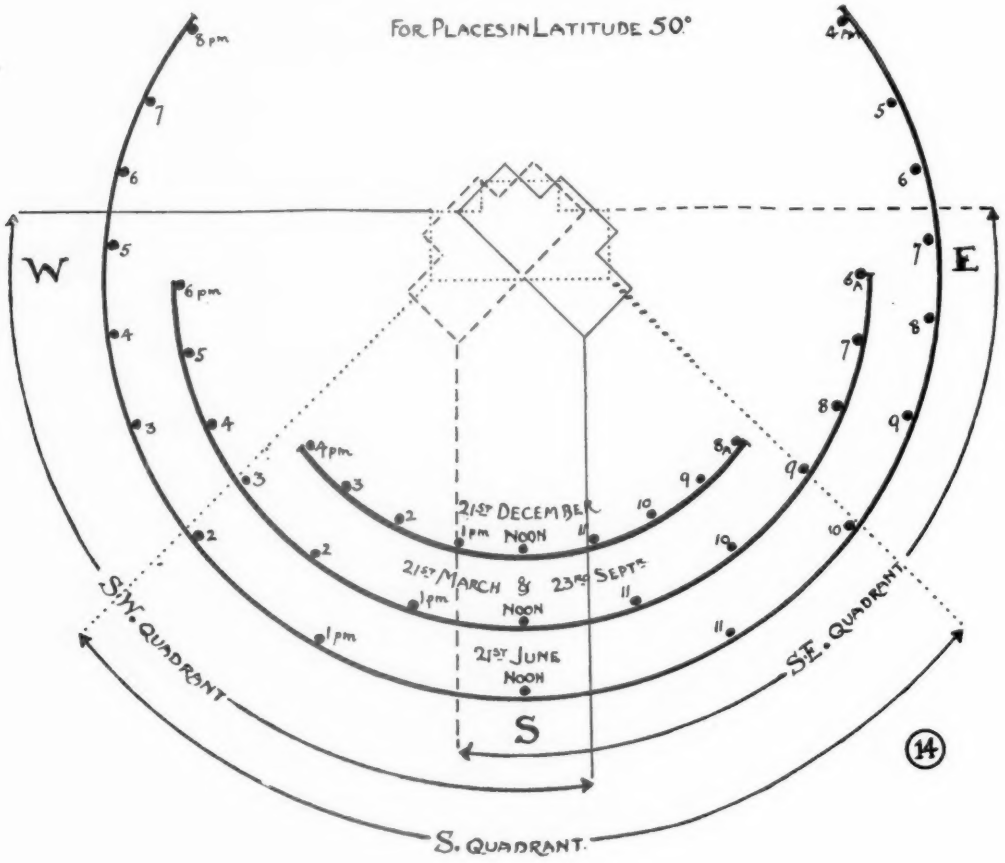

ABERDEEN
N
SW
S
SE
TOTAL
35.20%
7/10 6%
= 4.20%
17%
7/10 20%
= 14%
11


ABERDEEN
N
E
SE
S
TOTAL
38.90%
7/10 10%
= 7.00%
20%
7/10 17%
= 11.96%
12

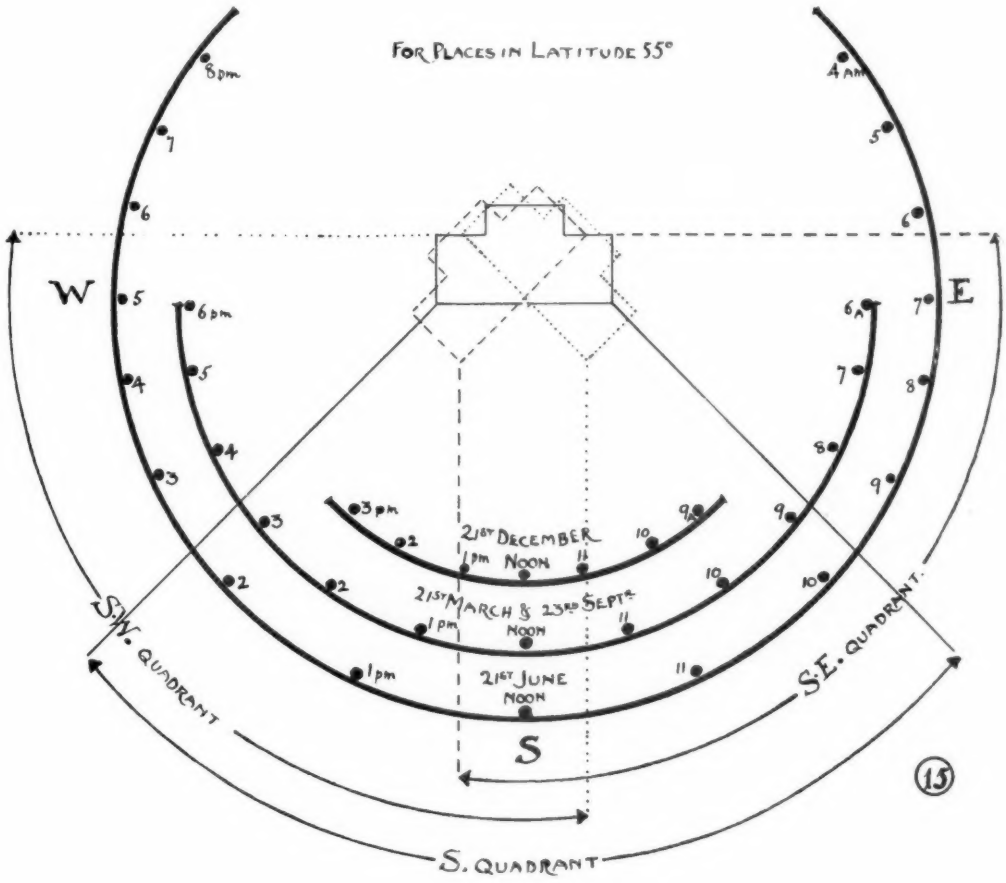

ABERDEEN
N
E
SE
S
TOTAL
30.30%
10%
7/10 20%
= 14%
13

Allusion has been made already to the fact that for the average man, about to build a house in this country, there is perhaps no influence so powerful, no objective so clearly defined and so definitely desirable of attainment, as a sunny aspect. Such reasoning as may be exercised begins and ends with "Face the south and get sun into the rooms all day long." It will be seen from the following diagrams that a south aspect does not secure this, even when the planning is so skilful as Mr. Dening's, where all living rooms and bedrooms face the best aspect.

Diagrams Nos. 14, 15 and 16 have been prepared to show precisely what sunshine is received on fronts facing south-west, south or south-east; and, as sunshine from very oblique angles is of little importance, a quadrant has been struck for each aspect and only sunshine received at hours coming within such quadrant is assumed worthy of consideration. These diagrams are plotted for three latitudes, embracing the whole of the British Islands. The chief difference between latitudes 50 and 60 deg. is that at Lat. 60 deg. the days are shorter in winter and longer in summer. In considering the relative merits of aspects as demonstrated in these diagrams, the essential principle kept in view is, not what aspect secures the largest total of sunshine daily (at which one might arrive merely by adding up the sunshine hours given in the tables), but which secures the best of the sunshine and at hours when it will be enjoyed most fully.



In this relation, few will fail to agree that it is most important to secure morning sunshine to the fullest possible extent, and that, so far as is practicable, the fiercest rays of afternoon sun in summer, which make living rooms almost unbearable and render bedrooms stifling and aglow with heat far into the night, should be avoided.



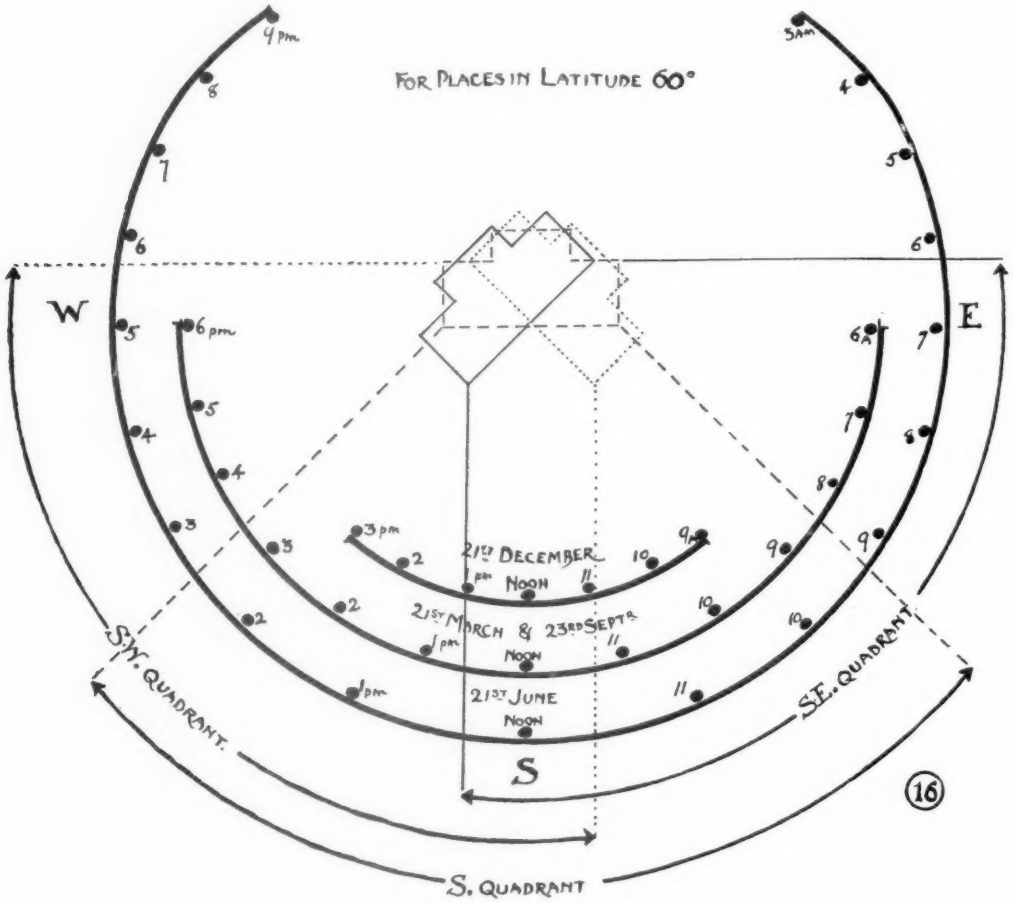
In diagram No. 14 the elevation facing south-west gets no sun until after eleven o'clock at any season of the year. On the other hand, it is exposed to the full strength of summer heat and can only be regarded as a really bad aspect.

In the same diagram the elevation facing south appears attractive because all the sunshine of a winter day comes within its quadrant. Closer inspection, however, suggests that the early and precious morning hours are somewhat obliquely placed, for which the scanty sunshine of mid-winter late afternoon would scarcely compensate. In spring and autumn the sun does not enter its quadrant until nine and in summer until ten o'clock. It also receives too liberal a share of the fierce summer sun. This is a slightly better aspect than south-west, but not a good one.

The elevation facing south-east is free from the foregoing objections. It receives directly the rays of winter morning sun, retaining them up to one o'clock, after which they are of less importance. It enjoys the whole of the morning sun in spring and autumn and from half past six in the morning until

past noon in summer. It is free from the excessive heat of summer, for the sun is out of its quadrant shortly after twelve o'clock and the front is entirely in shade before two o'clock at midsummer. This is the best of all aspects for sunshine and may be varied slightly towards south or east, to meet special requirements, without impairing its many advantages. Similar consideration of diagrams 15 and 16, with the sunshine tables, furnishes results not differing materially from those applying to No. 14.

Although, as has been indicated already, a large percentage of annual rainfall comes to most places with south-west or south winds, at others this is not so, and many, like Aberdeen, receive most rain from the south-east. Where south-west or south are the wet winds, they furnish additional argument against south-west and south aspects and often in such localities the south-east aspect is a dry one, as appears in the diagrams of rainfall. Such conditions would clinch any argument in support of the south-east aspect. Where, as at Aberdeen and many East Coast stations, most storms and rain come from the south-east, and the south-west wind is a dry one; the problem becomes one of the respective importance of aspect in relation to sunshine *versus* aspect in relation to storms and rainfall. A certain nip in the air, associated with the East Coast, may temper the summer sun's heat and so modify the objection taken to a south-west aspect, while desire for shelter from



bleak east winds of winter and spring, which are inseparable from such localities, may bring the scale down further in favour of the south-west aspect, but always at the price of turning away from the cheery morning sun. The choice is as difficult as the choice for other stations was simple. The conventional south aspect might prove a good compromise, but the student may test this himself by preparing a statement of pros and cons from the diagrams and tables provided.

Tables showing average bright sunshine at each hour of the day are given for five stations, from which some idea may be obtained as to the expectation of sunshine in various parts of the British Isles. With each of these is a summary, showing sunshine received in each month during five periods of the day. These figures are extracted and compiled from the Meteorological Office Year Book for 1916. Unfortunately, inadequate funds prevent this office collating and tabulating similar records, which it possesses, from a large number of stations.

A summary of all conditions affecting an aspect, arranged as pros and cons, would present the matter as follows :—

Latitude 50 *deg.*

South Aspect.

Pros.	Cons.
Receives sunshine all day in winter.	More benefit would be received from morning sun if rays were less oblique, even if some afternoon sun were lost. In spring and autumn this aspect gets no morning sun until nine o'clock. In summer does not receive morning sun until ten o'clock. Receives fiercest afternoon sun in summer. A very wet and stormy aspect in most localities. At Falmouth it receives 49·60 per cent. and at Richmond 40·30 per cent. of the annual rainfall.

Latitude 50 *deg.*

South-East Aspect.

Pros.	Cons.
The fullest benefit is obtained from morning sun in mid-winter, about ·80 out of 1·17 hours at Richmond, 1·25 out of 1·73 hours at Falmouth. Every day towards autumn or spring this morning advantage increases. It secures the morning sun at these seasons, which the south aspect misses up to 9.0—see diagram No. 14. It secures cool living rooms and fresh bedrooms in summer, for sun is out of this quadrant soon after 12.0. It has the smallest rainfall of the southerly aspects, at Falmouth 28·20 per cent. and at Richmond 27·30 per cent.	The sun leaves this quadrant about 12.30 in mid-winter.

Diagram No. 14 shows approximate positions of the sun at each hour of the day for the extreme south of England, latitude 50 deg., at the summer and winter solstices and at the spring and autumn equinoxes.

The superposed block plans of the house are drawn :—

South-west aspect in line.

South aspect in dotted line.

South-east aspect in broken line.

Only sunshine received by front elevations at hours within their respective quadrants is considered in making comparisons. Rays from outside a quadrant are regarded as too oblique to be taken into account.

Diagram No. 15 shows approximate positions of the sun at each hour of the day for places in latitude 55 deg. (as South Shields and Eskdalemuir) at the summer and winter solstices and at the spring and autumn equinoxes.

The superposed block plans of the house are drawn :—

South-west aspect in dotted line.

South aspect in line.

South-east aspect in broken line.

Only sunshine received by front elevations at hours within their respective quadrants is considered in making comparisons. Rays from outside a quadrant are regarded as too oblique to be taken into account.

Diagram No. 16 shows approximate positions of the sun at each hour of the day for North Britain, latitude 60 deg., at the summer and winter solstices and at the spring and autumn equinoxes.

The superposed block plans of the house are drawn :—

South-west aspect in dotted line.

South aspect in broken line.

South-east aspect in line.

Only sunshine received by front elevations at hours within their respective quadrants is considered in making comparisons. Rays from outside a quadrant are regarded as too oblique to be taken into account.

FALMOUTH AVERAGE 1881-1915
50° 9′ N. 5° 4′ W.

Hours are measured from 30 minutes before to 30 minutes after each hour of Local Apparent Time. This at all Stations.

Bright Sunshine.

	4-	5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	DAY
JANUARY					02	18	28	33	29	28	25	17	02					1·62
FEBRUARY				01	17	32	36	40	41	40	37	32	17	01				2·94
MARCH			01	16	37	43	46	49	48	48	47	44	39	21	01			4·40
APRIL		01	18	39	47	51	54	55	55	56	55	54	52	41	22	07		6·07
MAY		13	39	48	51	55	57	58	58	59	59	61	59	55	48	10		7·36
JUNE	01	23	38	44	47	49	53	53	54	57	58	58	58	55	49	30	01	7·28
JULY		19	37	44	48	51	54	56	55	56	56	58	56	56	47	26		7·19
AUGUST		04	29	44	50	55	56	58	59	59	60	57	55	51	47	05		6·89
SEPTEMBER			06	27	43	49	52	54	55	56	54	53	49	36	07			5·41
OCTOBER				05	29	40	44	45	45	44	43	38	28	07				3·68
NOVEMBER					07	28	35	38	38	37	35	25	07					2·48
DECEMBER					01	14	27	31	32	29	25	13	01					1·73
YEAR		05	14	22	32	40	45	48	47	47	46	43	35	27	19	07		4·77

SUMMARY SHOWING SUNSHINE RECEIVED DURING EACH OF FIVE PERIODS

	J	F	M	A	M	J	J	A	S	O	N	D
BEFORE 9·30 AM	·20	·50	·97	1·56	2·06	2·02	1·99	1·82	1·25	·74	·35	·15
9·30 TO 12·30 PM	·90	1·17	1·43	1·64	1·73	1·60	1·65	1·73	1·61	1·34	1·11	·90
12·30 TO 3·30 PM	·70	1·09	1·39	1·65	1·79	1·73	1·70	1·76	1·63	1·25	·95	·67
3·30 TO 6·30 PM	·02	·18	·61	1·15	1·62	1·62	1·59	1·53	·92	·35	·07	·01
AFTER 6·30 PM				·07	·16	·31	·26	·05				

RICHMOND AVERAGE 1881-1915 (in Old Deer Park, adjoining Kew)
51° 28′ N. 0° 19′ W.

Hours are measured from 30 minutes before to 30 minutes after each hour of Local Apparent Time.

Bright Sunshine.

	4	5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	DAY
JANUARY					08	18	23	26	25	23	11	01						1·35
FEBRUARY				08	19	27	30	31	33	30	24	10						2·10
MARCH			09	23	33	37	40	40	40	37	35	28	13	01				3·36
APRIL		01	13	31	40	45	48	50	49	49	49	46	43	35	18	01		5·18
MAY		10	34	44	49	51	52	54	52	52	50	49	47	44	38	19	01	6·46
JUNE		16	34	41	44	48	50	50	52	51	51	50	48	45	42	28	03	6·53
JULY		13	34	42	46	50	52	52	51	52	51	49	47	44	40	25	02	6·50
AUGUST		02	22	37	47	51	54	54	53	52	52	50	47	43	32	07		6·03
SEPTEMBER			02	18	33	43	50	52	52	52	51	51	44	31	05			4·84
OCTOBER				03	17	28	35	39	38	39	38	32	21	04				2·94
NOVEMBER					01	10	21	28	31	30	28	20	04					1·73
DECEMBER					05	17	21	22	23	20	09							1·17
YEAR		04	12	19	25	32	37	40	40	40	39	35	28	22	15	07	01	3·96

SUMMARY SHOWING SUNSHINE RECEIVED DURING EACH OF FIVE PERIODS

	J	F	M	A	M	J	J	A	S	O	N	D
BEFORE 9·30 AM	·08	·27	·65	1·30	1·88	1·83	1·85	1·59	·96	·48	·11	·05
9·30 TO 12·30 PM	·67	·88	1·17	1·47	1·58	1·52	1·55	1·61	1·54	1·12	·80	·60
12·30 TO 3·30 PM	·59	·87	1·12	1·44	1·51	1·52	1·52	1·54	1·54	1·09	·78	·52
3·30 TO 6·30 PM	·01	·10	·42	·96	1·29	1·35	1·31	1·22	·80	·25	·04	
AFTER 6·30 PM.				·01	·20	·31	·27	·07				

ABERDEEN AVERAGE 1881-1915
57° 10′ N. 2° 6′ W.

Hours are measured from 30 minutes before to 30 minutes after each hour of Local Apparent Time.

Bright Sunshine.

	4	5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Day
January						·04	·16	·23	·24	·23	·18	·07						1·15
February						·06	·24	·34	·38	·38	·38	·35	·27	·10	·01			2·51
March						·09	·23	·29	·33	·33	·33	·31	·30	·27	·23	·11	·01	2·83
April				·02	·12	·24	·31	·35	·36	·37	·37	·38	·36	·35	·32	·27	·13	·02	3·97
May			·01	·14	·25	·29	·32	·34	·34	·35	·36	·36	·36	·36	·34	·31	·26	·16	·02	4·57
June			·05	·18	·24	·27	·30	·32	·33	·35	·35	·35	·36	·34	·32	·30	·28	·21	·07	4·62
July			·03	·15	·20	·25	·28	·29	·29	·29	·30	·30	·29	·28	·28	·25	·21	·15	·04	3·88
August				·05	·17	·23	·28	·30	·31	·32	·33	·33	·32	·31	·28	·22	·15	·04		3·64
September					·03	·16	·26	·30	·32	·32	·33	·32	·31	·29	·27	·18	·08			3·12
October						·02	·12	·25	·29	·30	·31	·31	·30	·25	·15	·02				2·32
November							·09	·20	·23	·25	·25	·21	·11	·01						1·35
December							·01	·11	·19	·21	·19	·13	·02							·86
Year	·01	·05	·08	·13	·18	·24	·28	·31	·31	·31	·29	·24	·19	·14	·09	·05	·01			2·91

Summary showing Sunshine received during each of Five Periods

	J	F	M	A	M	J	J	A	S	O	N	D
Before 9·30 AM	·04	·30	·61	1·14	1·35	1·36	1·20	1·03	·75	·39	·09	·01
9·30 to 12·30 PM	·63	1·10	·99	1·10	1·05	1·03	·88	·96	·97	·90	·68	·51
12·30 to 3·30 PM	·48	1·00	·88	1·08	1·08	1·05	·87	·95	·92	·86	·57	·34
3·30 to 6·30 PM		·11	·35	·72	·91	·90	·74	·65	·48	·17	·01	
After 6·30 PM.				·02	·18	·28	·19	·04				

ESKDALEMUIR AVERAGE 1911-1915
55° 19′ N. 3° 12′ W.

Hours are measured from 30 minutes before to 30 minutes after each hour of Local Apparent Time.

Bright Sunshine.

	4	5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Day
January					·01	·06	·12	·16	·16	·17	·17	·09	·01					·97
February				·01	·09	·17	·21	·24	·21	·24	·20	·13	·07					1·57
March				·12	·23	·31	·34	·37	·36	·37	·35	·30	·22	·10	·01			3·08
April			·02	·15	·31	·37	·40	·43	·42	·41	·42	·43	·44	·38	·34	·19	·03	4·74
May		·02	·11	·22	·28	·32	·42	·43	·45	·45	·44	·41	·40	·39	·38	·33	·18	·01	5·24
June		·03	·16	·24	·31	·36	·37	·43	·45	·44	·44	·44	·41	·36	·40	·34	·23	·04	5·45
July		·02	·12	·25	·32	·32	·36	·38	·39	·39	·39	·41	·43	·41	·35	·28	·15	·02	4·99
August			·03	·13	·26	·35	·38	·36	·39	·40	·38	·39	·37	·36	·31	·17	·03		4·31
September				·01	·18	·34	·40	·43	·45	·45	·45	·47	·45	·37	·25	·04			4·29
October					·03	·17	·28	·30	·30	·31	·33	·29	·25	·19	·03				2·48
November						·05	·19	·28	·30	·28	·28	·28	·18	·02					1·86	
December							·03	·10	·11	·16	·13	·10	·03							·66
Year	·01	·04	·08	·15	·22	·28	·32	·34	·34	·34	·33	·29	·28	·18	·11	·05	·01			3·82

Summary showing Sunshine received during each of Five Periods

	J	F	M	A	M	J	J	A	S	O	N	D
Before 9·30 AM	·09	·27	·66	1·25	1·37	1·47	1·39	1·15	·93	·48	·24	·03
9·30 to 12·30 PM	·44	·66	1·07	1·26	1·33	1·32	1·16	1·15	1·33	·91	·86	·37
12·30 to 3·30 PM	·43	·57	1·02	1·29	1·25	1·29	1·23	1·14	1·37	·87	·74	·26
3·30 to 6·30 PM	·01	·07	·33	·91	1·10	1·10	1·04	·84	·66	·22	·02	
After 6·30 PM.				·03	·19	·27	·17	·03				

CAHIRCIVEEN AVERAGE 1881-1915 (3 miles from Valentia)
51° 56′ N. 10° 15′ W.

Hours are measured from 30 minutes before to 30 minutes after each hour of Local Apparent Time.

Bright Sunshine.

	4	5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Day
January					·01	·11	·23	·27	·28	·27	·23	·15	·03					1·58
February					·10	·25	·32	·34	·34	·33	·33	·27	·16	·02				2·46
March				·13	·32	·39	·42	·45	·45	·43	·42	·39	·34	·19	·02			3·95
April			·01	·16	·35	·42	·46	·48	·48	·49	·49	·48	·47	·43	·39	·22	·02	5·35
May			·15	·36	·42	·45	·48	·50	·51	·52	·53	·52	·52	·50	·47	·39	·22	·01	6·55
June		·02	·20	·32	·39	·42	·44	·46	·46	·48	·50	·50	·49	·47	·43	·37	·27	·04	6·26
July		·01	·11	·23	·28	·32	·36	·39	·41	·43	·43	·44	·44	·41	·39	·31	·19	·02	5·17
August			·03	·19	·29	·34	·39	·42	·43	·44	·46	·45	·45	·42	·37	·27	·07		5·02
September				·02	·18	·33	·40	·45	·46	·47	·47	·47	·45	·40	·27	·06			4·43
October					·01	·20	·34	·38	·41	·42	·43	·40	·36	·25	·06				3·26
November						·02	·20	·31	·35	·35	·35	·31	·22	·06					2·17
December							·06	·20	·26	·26	·24	·19	·10						1·31
Year		·04	·11	·17	·24	·32	·38	·40	·41	·41	·40	·36	·29	·22	·14	·06	·01		3·96

Summary showing Sunshine received during each of Five Periods

	J	F	M	A	M	J	J	A	S	O	N	D
Before 9·30 AM	·12	·35	·84	1·40	1·86	1·79	1·81	1·24	·93	55	·22	06
9·30 to 12·30PM	·78	1·00	1·32	1·45	1·53	1·40	1·23	1·29	1·38	1·21	1·01	72
12·30 to 3·30PM	·65	·93	1·24	1·44	1·57	1·49	1·31	1·36	1·39	1·19	·88	·53
3·30 to 6·30PM	·03	·18	·55	1·04	1·36	1·27	1·11	1·06	·73	·21	·06	
After 6·30PM.				·02	·23	·31	·21	·07				

Regional Architecture of the West of England *

BY C. J. TAIT [*F.*].

"WHAT, you are stepping westward?" To many, there seems to lie a sort of magic in this challenge. To Wordsworth it presented 'a wildish destiny.' Devon, it is true, has its wild spots, but the West of England, of which Exeter held the key, with Bristol as an outwork, owes its charm and its greatness to the civil eminence it has always enjoyed. Devon was born great. Her fertile soil, her genial climate and extensive coast line were hers at birth. She achieved greatness by the daring of her mariners and the enterprise of her merchants. She had greatness thrust upon her by King William IV, who selected Devonport as a fitting site for a naval base. She is the mother of Grenville, Drake and Raleigh, of the Courtenays, Fortescues, Bullers and Carews, names which may stir you if only by their sound. But such names have also become a matter of history, a history that has necessarily moulded what the authors term the *regional* architecture of the West. The Cathedral and Castle of Exeter still stand to mark the advent of the Norman conquerors, and there is much throughout the county to remind us of the regime of the stannary towns—Ashburton, Tavistock, Plympton and Chagford—when the Parliaments were held upon Crockem Tor and presided over by the Lord Warden of the Stannaries. But the buildings discussed and represented in a series of very fine photographic plates date for the most part from Dutch William, who landed, as we all know, on the shores of Tor Bay, and read his first proclamation from the market cross at Newton Abbot. Dutch influences were introduced in other than a general way by the trade carried on with Holland from the many seaports of the county. Dutch bricks and houses with Dutch features built around courtyards are common in such little towns as Topsham, which could once boast that it shipped more tobacco into the kingdom than did the port of London. The terrace houses of the eighteenth century, such as in the Barnfield and Colleton Crescents, Exeter, are unequalled in the quality of their brickwork, the dignity of the window spacing and the variety of their cast-iron verandah designs.

The Devon and Exeter Institution, said to possess one of the largest libraries in the West of England, belongs to this period. Bristol at the time was second only to London as a literary centre. Southey, Coleridge, Wordsworth, Chas. Lloyd, and Joseph Cottle the publisher figured there. Burke sat for the city. An interest in literary culture, which travelled westward and was maintained both in Exeter and Plymouth, must receive recognition for the influence it doubtless exerted over civic development.

Neither Devon nor Cornwall can be reckoned as a brick county. Walls of some local stone, stuccoed and colourwashed, provided for the deficiency, and plaster, plain or rusticated, was used with much effect. Many a low-browed house, with extended eaves and coloured surface, nestles picturesquely on the countryside with little else to recommend it. The warm volcanic felspars, too, that crop out, often miles away from their base on Dartmoor, or the New Red Sandstone beds, are a more than satisfactory substitute for a good brick, while the silver-grey of the Cornish slate makes ample amends for the absence of a red tiled roof.

None of such building makes any pretentious claims. We have to seek that in the architecture of some of the larger country houses, such as Saltram, Carclew and Anthony, upon the latter of which Gibbs was employed. Yet modest as the many examples are, they possess a *naïveté* that would seem to belong exclusively to the West. Exactly wherein this peculiar charm lies, it is difficult to say. Possibly it may be attributed to an element of pleasing surprise, centred in some detail or feature, in an otherwise uneventful façade, buoyantly claiming your attention. The portico of the Seven Stars Inn, Totnes, with its loggia over (page 130), the hood above the entrance to the house in Smith Street, Torrington (page 89), and the ensemble of porch and niche at Truro (page 121) strike such a note. Surprise is the soul of romance. The footprint in the sand is the very key-stone of The Strange Surprising Adventures of Robinson Crusoe.

The terms classic and romantic have no sharply defined distinction. Forms which owe a primary debt to Greece or Rome may be quite as romantic in treatment as those of mediæval origin. But following the distinction commonly observed, when we approach the close of the eighteenth century and the early part of the next, and we come upon the work of Daniel Alexander, Sir John Rennie, John Foulston and Charles Fowler, we realise that we are entering upon quite another type of architectural expression. Princetown, where "every prospect pleases and only man is vile," rose upon Dartmoor from the designs of Alexander. Rennie built the Victualling Yard at Stonehouse. Plymouth owes much of its character to Foulston and his partner Wightwick, and is well represented by the Theatre Royal and Athenæum. Fowler—the only locally born architect among the group—built

* *Regional Architecture of the West of England.* By A. E. Richardson, F.R.I.B.A., Professor of Architecture, University College, London, and C. Lovett Gill, F.R.I.B.A. London: Ernest Benn, Ltd. £2 5*s*. net.

the markets at Exeter, following upon his Leadenhall Market in the City. The Higher Market at Exeter possesses perhaps the most satisfactory façade in the Neo-Greek manner that has been attempted. It must be regretted that the opportunities of appreciating Rennie's fine work at Stonehouse are necessarily so curtailed by the nature of the site, since it is a monumental example of the period.

All that Professor Richardson has to say upon a period concerning which he is a master, is of the highest interest. Sketches from his notebooks are dispersed through the volume which display his vivid manner; and these, with Mr. Gill's plates, have put on record many delightful things that changes cannot be relied upon to spare.

Reviews

AN ARCHITECTURAL PILGRIMAGE IN OLD MEXICO. *By Alfred C. Bossom. Fo. New York, 1924 [Scribner's Sons]. £4 4s. net.*

For the last few years the thoughts of American architects have increasingly turned in the direction of Spanish Mexican architecture, as a source of inspiration for such buildings as summer dwellings, county clubs and seaside hotels.

The late Bertram Goodhue, most versatile of modern designers, was one of several New York architects who experimented in this direction.

Mr. Alfred Bossom, an English architect who has made good in the New World, and who by his generosity in founding a scholarship for English students has lately shown that his sympathies are still with us, has in his *Architectural Pilgrimage in Old Mexico* given us a delightful and enthusiastic book. "Not to visit Mexico," says Mr. Bossom, "is not to know the Western Hemisphere. The buildings in Mexico, with the slightest adaptation to fit them for twentieth-century requirements, comply with American needs in a manner rarely equalled by any other style of architecture. . . .

"The great American hotel with its multitudes of windows, its airy foyers and ball-rooms, penthouses, towers and roof gardens, seems instinctively to demand the use of a type of architecture as elastic in treatment as that found in Mexico. The towering office building with its dominating vertical lines, and nothing to relieve its great surfaces except the piercing of innumerable holes to form windows, can be designed after Mexican ideas with a success not easily obtained in forms that must maintain fixed characteristics with a rigid regularity."

Though one may not be able to go the whole way with the author in his enthusiasm for the Mexican Spanish work of the sixteenth century and after, yet it must be admitted that it not only forms a link between the Old World and the New, but, granting the eclecticism of the New World to be allowable, it provides a suitable basis of design for the type of work that is being erected in the Southern States and on the Pacific slope. The book keeps rigidly to the post-Spanish-conquest period, with one exception, the delightful little Toltec statuettes shown on page 4, which are so modern in feeling that they might be carved by one of our own sculptors.

Explanatory notes are given to many of the illustrations, such as "Delicate balconies and graceful waterspouts are an easy method of adding charm to the plainest buildings" (VII). "If the door is not large enough for the composition add more surrounding features" (LXV). "Irregularity begets interest" (XCII). Rather a dangerous saying this last one, but these little aphorisms may be helpful in giving the lay reader some insight into the theory of architectural design.

The subjects of the illustrations are well chosen, and notwithstanding such difficulties as were encountered in the execution of plate XIV they are excellently photographed by Mr. Bossom himself, who is not only a skilled photographer, but, as he has shown by his own illustrations scattered through the book, is a charming draughtsman.

Says the author at the end of his "Foreword," "If this account, then, of a pilgrimage to shrines of Mexican architecture shall be the means of inducing others to take up their staffs and go, I shall feel that I have done something, however little, in strengthening the affinities of culture and tradition which unite the Anglo-Saxons and the Latins in a better understanding."

ARTHUR BARTLETT [*F.*].

ENGLISH CHURCH FITTINGS, FURNITURE AND ACCESSORIES. *J. Charles Cox, LL.D., F.S.A. B. T. Batsford.*

This volume gives an interesting series of illustrations of church furniture, fittings and accessories. Most of them are photographic reproductions. A few only are sketches or diagrams. One, of a lectern, is drawn to scale with figured dimensions. Many of the subjects illustrated, including the one last mentioned, have appeared in other volumes issued by the same publishers. Much that is interesting archæologically is provided in the twenty chapters of the book. Valuable as these illustrations and descriptions may be, the volume would be more useful if practical measured drawings were given. It might be objected that if these were provided old work would be too much imitated by lifeless reproductions. The real value of such drawings would be to show something of the minor dimensions in detail; indicate the scale of the whole fitting or piece of furniture

in relation to the building in which it is seen; and, also, give some real information about the way such things were built up, constructed, or made. All this old work is, as Mr. Aymer Vallance says in his excellent introduction, of immense value to those who wish to study a fine craft tradition. But no student can really study, no craftsman can fully appreciate the value, or let himself feel the influence, of the deft skill by which it was produced, unless he is provided with something more than pictorial photographs, or historical essays, by which to try and understand that skill.

What we need most to-day is more effort to get back again to methods of training and of work that will develop fully the real, if at times latent, ability of modern craftsmen designers.

H. C. C.

SPECIFICATION FOR ARCHITECTS, SURVEYORS, ENGINEERS AND ALL INTERESTED IN BUILDING. *Edited by Frederick Chatterton, F.R.I.B.A. The Architectural Press, London, S.W.1.*

The 1924, which is the 26th, edition of this valuable work has been received. It is no mere reprint of the previous issue, but has been thoroughly revised in every detail. It is fully up to the standard of its predecessors.

The specification is prefaced by several valuable treatises, all new to this issue. The first is by Mr. Stanley Hamp, F.R.I.B.A., on "Hotels and their Equipment." A thorough description of all requirements is given, also a number of illustrations of notable examples. Mr. Hamp is, of course, a leading authority on the question of hotel planning. He advocates the American system of relying entirely on artificial light and ventilation for the bathroom attached to a bedroom. It certainly conduces to compact planning, but English opinion has not, as yet, been educated up to that arrangement.

Mr. Edwin Gunn, A.R.I.B.A., writes on "Half Timber Construction," and illustrates his instructive article with many old and modern examples. Among the latter is Messrs. Liberty's building by the late Mr. Edwin T. Hall, F.R.I.B.A., and Mr. Stanley Hall, F.R.I.B.A. It may give an impetus to this type of construction and, it is to be hoped, picturesque design generally. Some are getting somewhat sick of the bald and barracky designs that are seen at times.

Mr. Ewart A. Ashton has an article on "Inexpensive Timber Roofs." Examples are given of a number of extremely light roofs, constructed on the laminated principle during the war. They stood perfectly well. This seems to prove that, frequently, timbers are used of an unnecessarily large and wasteful size.

The fourth article is by Mr. Herbert Kenchington, A.R.I.B.A., on "The Submission of Plans to Public Authorities."

The last article is a valuable one by the editor, Mr. Frederick Chatterton, F.R.I.B.A., on the burning question of "Housing," in which full particulars are given of the 1923 Act.

One of the new features of this issue is some carefully drawn examples of various standard constructive details by Mr. W. R. Jaggard, F.R.I.B.A.

In the actual specification every operation of every trade is completely and fully described by specialist writers in their respective branches. There is a reinforced concrete section, which includes the Institute report and the standard specification of the Institution of Structural Engineers.

There are very few items that call for anything in the nature of criticism. On page 8, paragraph 8, cement mortar, when great strength is required, is specified to be 1 to 1. Mr. D. B. Butler, M.I.Struct.E., etc., in his Paper read before the Institution of Structural Engineers last year, showed that Portland cement, as now manufactured, is very much stronger than the requirements of the British Standard Specification. Considering this, 1 to 2 or 3 would suffice in many cases. Also the exposure to air for 14 days, mentioned on page 131, paragraph 4, is unnecessary with finely ground cement. It may lead to hydration. The clause mentioning that timber should be Petrograd or Archangel was written in intelligent anticipation of the re-opening of the Russian timber trade, which has now actually begun.

Every trade is prefaced by general notes that give valuable information. One is reminded of a lecture on "Specifications" given by the late Ewan Christian before the Architectural Association many years since, in which he completely held the attention of a large audience for over two hours! It really was a most instructive address on the art of construction.

W. J. H. Leverton, *Licentiate R.I.B.A.*

The Library

L'ART ROMAN EN ITALIE. L'architecture et la décoration deuxième série par Camille Enlart fo. Paris [1924]. £3 3s. [Éditions Albert Morancé].

A volume forming the continuation of the work of M. Martin published before the War. The illustrative matter was selected by him, and the text and comments on the examples are by M. Enlart, Curator of the Museum of Comparative Sculpture, Paris. The large and excellent plates are from photographs of the Churches and Cathedrals of the principal cities of Northern Italy, Lucca, Como, Pavia, Bologna, Florence, Pisa, Pistoia, and Verona.

C. H. T.

THE DUTCH COLONIAL HOUSE. By Aymar Embury. 40 New York 1919. £1 1s. [Robert M. McBride and Co.]

Is an American publication containing a good chapter on the genesis of style in which the origin of the Dutch Colonial house is clearly described and the development which is still in progress in modern work. A chapter on materials accounts for certain forms and the treatment of the roof and of the plan is discussed at length. The book is illustrated with a large number of photographs and several plans. The furniture and decoration of these small houses completes the work.

C. S.

A SHORT HISTORY OF HAMPTON COURT TO THE DEATH OF CHARLES I. By Ernest Law, C.B. 6 -. [Bell, London, 1924.]

A handy and fully illustrated volume compiled from the author's larger works, treating the history of the Palace in popular form. Many drawings by Herbert Railton and other artists are included, also numerous portraits and old prints.

M. S. B.

LOAN LIBRARY CATALOGUE.

A new catalogue for the Loan Library has been recently compiled and may be purchased at the Institute. Price 1s. 6d. Postage 3d. extra.

Correspondence

INIGO JONES.

46 Great Russell Street,
London, W.C.1,
21 August 1924.

The Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I read with great interest the President's courteous, I might almost say kindly, criticism of my little monograph on Inigo Jones. He however does not quite do me justice (nor, incidentally, himself either) when he implies that I had merely accepted the traditional view of Jones's authorship of certain works without giving consideration to recent criticism disputing this view.

On the contrary, besides some of the original drawings, I consulted the works of the greatest authority of, what I may perhaps be permitted to call, the anti-Jones school—viz., the writing of Mr. Gotch himself!

I have far too great a respect for the deep and sincere scholarship of our President, and too great a pleasure in the charm of his writing to miss anything from his pen, but far less would I do so when the subject was Inigo Jones.

That I did not refer to Mr. Gotch's views in my essay was due to the fact that it appeared to me to be almost verging on impertinence for a mere member of the rank and file to drag in his President's name for the purpose of disagreeing with him.

I admit at once that I have not a fraction of Mr. Gotch's learning or knowledge of the original documents, but I did to the best of my ability endeavour to arrive at a fair and impartial conclusion. I hesitate even now to put forward my own views, and only do so because Mr. Gotch's article seems to call for some reply from me, however inadequate.

After having read through the whole of Mr. Gotch's articles dealing with Webb and Inigo Jones, not once but many times, I regretfully came to the conclusion that his case, though extremely well put and almost overweighted by the detail of his evidence, was, for me, as the Scotch would say "not proven."

Before dealing with the three buildings Mr. Gotch enumerates as not being the work of Jones, I should like for a short space to give a little consideration as to his evidence as a whole. First, as to the characters and relationship of the two men.

We know that Inigo Jones was a man of dominating personality and, judging from his drawings and what we are told of his life and character, a man of swift and imperious decisions, not at all the type of man one would imagine who would be content to make laborious detailed drawings if he could possibly get anyone else to do them for him.

We also know that Webb acted as his assistant for many years and had what appears to be almost a blind adoration for the genius of his master—just, in fact, the type of man who would be quite content to go on making laborious drawings from, say, a few inspired sketches or even slighter indications.

But surely allowing for even the most self-sacrificing modesty on Webb's part, one can scarcely imagine a modesty so great that he did not lay claim to the authorship of the King Charles Block at Greenwich in so emphatic a manner as to have established a tradition as its architect as strong or even stronger than that of Inigo Jones. Is it not probable that after building the Queen's house there must have been much talk between Jones and his assistant of the possible future development of the Greenwich site, and would it not be still more possible that Jones, in a few brief and fiery lines, would lay down his ideas of such development—possibly destroying the paper immediately he had finished his drawing?

This is, of course, pure assumption, but to upset an established tradition the evidence should not only be convincing but overwhelming, and in examining such evidence one may, perhaps, in the process be permitted to assume some alternative possibilities.

Mr. Bernard Shaw has recently given us a retrial of Joan of Arc, and interesting and impressive though it is one can hardly accept it as more than a slight modification of the traditional verdict of history.

Throughout his writings I feel that Mr. Gotch relies almost too confidingly on the evidence of drawings, and surely of all unreliable evidence of authorship of design, an architect's drawing is the worst! Indeed, Mr. Gotch himself says that the true history of Greenwich has to be written, so can he blame "us others" so very much if in the meantime we suspend judgment?

To pass on to the design for Whitehall, I know that the Banqueting Hall was built as a complete entity in place of a similar building destroyed by fire; but is it beyond the realms of possibility that Jones considered his building in relation to a future possible extension? Even some modern architects are known to have done this in working our their schemes!

I am with Mr. Gotch to this extent as to the Whitehall designs that I am quite prepared to admit that the elevations of the future palace might be the work of Webb, but I cannot believe that any brain but that of Inigo's could have laid down the main lines of that amazing and courageous plan.

Now to come to Coleshill, and here I need but linger a moment. Mr. Gotch has himself supplied me with the answer; he says "Inigo Jones was consulted during the operations." I will not spoil it by the addition of a single word!

In conclusion, I may say I think that Mr. Gotch has perhaps a ground of complaint against me in so far as, having admitted that his evidence is strong but not, in my opinion, conclusive, I might perhaps in fairness to him have given some indication of my " suspended judgment " in the monograph.

But it must be remembered that I was writing chiefly for the interested layman and not for the instructed architect, and that to have made any reference however oblique would have necessitated a long setting out of the arguments for and against which would have seriously entrenched on my short allowance of some 5,000 words. I decided, though possibly mistakenly, to take, as Mr. Gotch has it, the traditional view, safe in the assumption that, whatever was the respective share of these two architects in the design of the various buildings under dispute, without Inigo Jones there would have been no John Webb !

Yours faithfully,
STANLEY C. RAMSEY [*F.*].

The President makes the following comment on Mr. Ramsey's letter :

17 *September* 1924.

Mr. Ramsey's courteous letter disposes of the idea that he had accepted the traditional position of Inigo Jones without enquiry. Tradition, of course, dies hard, but, being merely hearsay evidence, it must eventually succumb to direct evidence if the latter is sound. That is the whole point—is it sound ? I think it is, and in any case it is there for anyone to see and then draw his own conclusions ; but the conclusions must be based on a complete survey. The matter is not one of balancing probabilities, but of getting at facts, and if anybody can produce evidence (as distinguished from tradition or conjecture) that Jones had any direct connection with the design of the Whitehall Palace, or King Charles's Block at Greenwich, it will be of the greatest interest, and will necessarily modify the opinions I have so far formed after prolonged investigation.

May I add that since writing to the JOURNAL I have received a paper on the History of Greenwich Palace by Mr. A. D. Sharp, founded on a wide research among original documents, and that the author came independently and from an entirely different point of view to the conclusion that Jones had nothing to do with King Charles's Block. Not only so, but he makes it clear that much of the later work at Greenwich has been inaccurately ascribed.

J. ALFRED GOTCH.

HOUSING FEES.

23 *Bedford Row, London, W.C.*, 11 *Sept.* 1924.

The Editor, JOURNAL R.I.B.A.,—

SIR,—A local authority appointed several independent architects (not as a panel) under separate retainers all duly sealed and incorporating General Housing Memorandum No. 4 in respect of a like number of different estates within its administrative area.

I should be glad to hear from any architect who, having been appointed under similar conditions, in due course received payment of his fees at the rates and on the basis of an independent housing scheme, and not on the assumption that the estate for which he had been retained was a part only of some other scheme

Yours faithfully,
J. DOUGLAS SCOTT.
Hon. Sec., Practice Standing Committee.

WORKMEN IN THE BUILDING TRADE.

23, *Throgmorton Street, E.C.2.*
17 *September* 1924.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—Would it not be possible for the Council of the R.I.B.A. to take some action in this matter, by appointing a Committee, or otherwise ? We have thousands of unemployed, abundance of work, and a serious shortage of skilled workmen. Partly trained men abound, but cannot be employed.

The result of the recent strike is that wages have been standardised, but men are unobtainable. With large housing schemes in view, the situation must get worse, and not better.

Surely architects, who know the facts, might help the country out of this distressful situation.—Yours faithfully,

R. LANGTON COLE [*F.*].

*** The Council have already taken action in this matter. A strong Committee has been at work on the subject for some months, and it is hoped that it will be in a position to lay its views before the Ministry of Health at an early date.—*Secretary, R.I.B.A.*

ARCHITECTS' BENEVOLENT SOCIETY'S INSURANCE SCHEME.

20 *September* 1924.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—May I trespass on your columns for a little space in which to call the attention of your readers to a very simple way in which they can help the Architects' Benevolent Society.

If in the next insurance they effect—be it on their life, their house, its contents, or any other thing that is theirs—they will ask their insurance company to put it through the agency of the Architects' Benevolent Society, the commission will be given to the society as a subscription in their name.

Architects are not usually agents for insurance companies, and therefore these agency commissions, which in the aggregate must amount to a very large sum per annum, are dissipated as far as the profession is concerned. The aim of the Benevolent Society is to

collect them and expend them for the good of the profession.

This is one of those simple proposals which, like "Daylight Saving," are so obvious that one wonders why no one thought of it before. The medical profession thought of this one some years ago, and are now, I understand, making a large income for medical charities out of it.

We architects can now do the same without even trouble for ourselves, and with great benefit to our Benevolent Society.—I am, yours faithfully,

MAURICE E. WEBB [*F.*].
Chairman, A.B.S. Insurance Sub-Committee.

Allied Societies

THE SOUTH WALES INSTITUTE OF ARCHITECTS AND THE CARDIFF CITY COUNCIL.

ENGAGEMENT OF ARCHITECTS FOR CORPORATION BUILDINGS.

On 31 July Mr. T. Alwyn Lloyd [*F.*], as Chairman of the Cardiff Branch of the South Wales Institute of Architects, introduced to the Cardiff City Council a deputation consisting of Messrs. Ivor P. Jones, A.R.I.B.A. (Hon. Secretary S.W.I.A.), Harry Teather, F.R.I.B.A. (Hon. Treasurer S.W.I.A.), C. F. Jones, A.R.I.B.A., C. H. Kempthorne, J. Williamson, A.R.I.B.A., and J. B. Wride.

In introducing the deputation Mr. Alwyn Lloyd made the following statement :—

Members of the Council may recollect that on several previous occasions our Institute has made requests that the design of buildings under the control of the Council and its various committees, apart of course from buildings connected purely with engineering works, should be entrusted to architects. We communicated with the Council regarding the desirability of instituting a public competition among architects for elementary and secondary schools; and for the extension of the fire station, we suggested that the London architect who designed the original building should be retained for the new building. I name these in case it might be thought that our present attitude is only of recent origin and confined to the Cathays Secondary School, which was the particular occasion for this deputation.

I should like to state at the outset that we much appreciate the courtesy of the City Council in consenting to receive this deputation and in affording us an opportunity of stating our case. In doing so, may I say that we are not approaching this matter in any spirit of opposition to Mr. Peirson Frank, the city engineer, and nothing that will be said is intended to have a personal bearing. We warmly welcome his recent appointment, as we recognise in him one of the most accomplished and capable municipal engineers and surveyors in the country. It is not at all for personal reasons, but rather for reasons of general policy, that we are here to-day.

As representing an honourable profession with long traditions of public service, we feel that it is our duty, not merely as members of that profession, but as citizens and ratepayers of this great city, to present our views to your Council on these matters. We are only perhaps uttering a truism when we claim that all buildings, even the humblest, and certainly buildings of a public character, should be well planned, well constructed and well designed; we believe that they should have architectural character and distinction, and not be merely repetitions of official type-designs or of plans previously prepared under conditions differing widely from those now prevailing.

In Cardiff we are naturally proud of the high standard of civic design and of forethought which are so well evidenced by the noble buildings of Cathays Park, erected under the direction of your Council. I venture to say that it is these buildings, and similar buildings elsewhere in the city, more than anything else, which have served in recent years to demonstrate the civic spirit and the national and commercial importance of Cardiff. These buildings, justly famed and of universal approbation, it is interesting to note, are all the result of public competition among architects.

As regards the new schools which the Council has decided to build, it seems to us just as important that they should be designed and their erection supervised by architects. We trust that this Council does not share the idea prevailing in some circles that schools are stereotyped buildings the planning of which can be safely left to Government regulation and to what one might call "routine" attention, in the course of many other duties in a public office.

School design is a highly specialised subject in which great advances have recently been made, such advances being almost entirely the result of the efforts of architects engaged in the erection of schools in various parts of the country. Architects, by the nature of their training and professional experience, have devoted many years to the close study of public and private buildings; they are constantly engaged in the solution of intricate problems, having to give these their personal attention and bringing their specialised knowledge to bear on them. In a public office, where the chief is already heavily burdened with other professional and official duties, much of the designing work has of necessity to be left to assistants. However well qualified these assistants may be technically, they have not the experience or the prestige of a principal. Assistants in an office change from time to time, whereas when an architect is in control and in constant touch with all the details of the work there is personality and continuity which invariably result in attractive, well-designed buildings.

May I remind members of the Council that there is in Cardiff a School of Architecture at the Technical College, now widely recognised as one of the best of its kind, which is under the control of this Council. In the interests of the students who are being trained there as well as in those of present practising architects, we feel that the Corporation would be well advised to provide opportunities as they occur for municipal buildings to be designed and carried out by architects.

At the conclusion of the interview the deputation was informed that their representations would receive careful consideration.

NEW METHODS OF HOUSE BUILDING.
Committee of Inquiry.

Before Parliament adjourned the Government accepted a motion in the House of Lords for an inquiry into the various alternative methods of house building, and the Minister of Health has accordingly set up a committee with the following terms of reference :—

To inquire and report as to new materials or methods of construction which are, or may be, available for the building of houses for the working classes, and to make recommendations as to the organisation required for securing the adoption and use of approved new materials or methods by local authorities and other bodies or persons providing such houses.

The committee will be constituted as follows :— Sir Ernest W. Moir, Bt., M.Inst.C.E. (chairman) ; Sir Frank Baines, C.B.E., M.V.O. ; Sir Charles T. Ruthen, O.B.E., F.R.I.B.A. ; Major Harry Barnes, V.P.R.I.B.A., F.S.I. ; Mr. John A. Brodie, M.Inst.C.E. ; Mr. R. Coppock ; Mr. E. R. Forber, C.B., C.B.E. ; Mr. G. Hicks ; Mr. H. J. C. Johnston ; Lieut.-Col. Cecil B. Levita, C.B.E., M.V.O., D.L., J.P., L.C.C. ; Mr. W. H. Nicholls ; Mr. A. G. White ; Mr. C. E.Whyte ; Mr. J. Wilson, F.R.I.B.A.

The secretary of the committee will be Mr. T. H. Sheepshanks, of the Ministry of Health, Whitehall, S.W.1, to whom all communications should be addressed.

Sir Ernest Moir is a partner with Lord Cowdray in S. Pearson and Son, Ltd., the contractors for public works.

Obituary

MRS. J. ALFRED GOTCH.

It was with great regret that members of the Institute read the announcement in *The Times* of 23 August of the death of Mrs. Gotch, the wife of the President of the Institute, after a long illness.

F. E. L. HARRIS [*A.*].

Mr. Harris, who died on the 5 July, was born on the 5 May 1864. He was educated at the Merchant Venturers College, Bristol, and the Bristol School of Art, serving his articles with Mr. W. H. Cowlin, of Bristol. Mr. Harris commenced in practice on his own account in 1889 at Chelmsford, and was selected, after a competition, to carry out the Education Offices at Oldham. In 1897 he was appointed as architect to the Co-operative Wholesale Society, Ltd., at their headquarters in Manchester, a post which he held, controlling a large staff, up to the time of his death. He was probably the first English architect to adopt reinforced concrete construction on an extensive scale. Amongst his many works are the central premises, bank, etc., of the Co-operative Wholesale Society, Ltd., Manchester ; extensions of branch premises of the Society in London ; drapery warehouses at Manchester, London and Newcastle ; flour mills at Manchester, London, Avonmouth and Newcastle ; depots at Cardiff and Bristol ; also weaving sheds, shoe factories, clothing factories and other large manufacturing premises in various towns in the kingdom, as well as the head offices of the Co-operative Union, Ltd., in Manchester, and warehouses in Denmark and Spain.

ARCHITECTS' BENEVOLENT SOCIETY'S INSURANCE SCHEME.

The Council of the Architects' Benevolent Society, having long found the means at their disposal for distribution unequal to the demands made upon them, inaugurated in February, 1923, a scheme of professional insurance by which the Architects' Benevolent Society acts as insurance agents, the commission thus obtained being added to the funds of the Society in the form of donations from the architects who insure. At first the scheme was limited to life assurance, and considerable profit accrued to the Society from this branch alone, but the Council have now extended their activities to include all other forms of insurance, such as fire, burglary, guarantee, employers' liability, motor car, insurance against professional liability claims, etc. One form of insurance by which the architect has a unique opportunity of assisting the Society, and which it is hoped he will use when in a position to do so, is in the insuring of buildings which are in course of erection, his client in this case being credited with the whole amount of commission as a subscription to the Architects' Benevolent Society.

Most men assure their lives and every man insures his worldly possessions : his house, his business, his motor-car. All an architect has to do, whatever form of insurance he may require, is to apply to the Architects' Benevolent Society. The Society is not tied in any way to any insurance company. Each architect who insures is free to choose his own office, but if he has no preference he can leave it to the Society to recommend an office where the class of policy he requires will be quickly and advantageously carried through.

The scheme effects unity. If architects insure through a central agency which is at the same time a Society whose entire income is expended on the less fortunate members of the architectural profession, they have the satisfaction of knowing that the commission which is attached to the transaction, and which is paid to the Architects' Benevolent Society, is returned by the Society to the architectural profession in the form of grants and pensions to " those in necessitous circumstances who have been engaged as architects or architects' assistants and to their widows and children." This is an aspect of the scheme which, it is felt, has only to be realised to appeal to all architects who care for the solidarity of their profession.

Full particulars of the scheme in the form of a booklet are being sent out this week to members of the profession. They can also be obtained on application to the Secretary, A.B.S., 9 Conduit Street, London.

BOARD OF ARCHITECTURAL EDUCATION.
R.I.B.A. Statutory Examination.

The R.I.B.A. Statutory Examinations for the offices of District Surveyor under the London Building Acts or Building Surveyor under Local Authorities will be held at the R.I.B.A., London, on the 22, 23 and 24 October, 1924.

Applications for admission to the examinations, accompanied by the fee of £3 3s., must be received at the R.I.B.A. not later than Saturday, 4 October 1924.

Full particulars of the examinations and application forms can be obtained from the Secretary R.I.B.A.

Competitions

RECONSTRUCTION OF THE KONINGINNE BRIDGE, ROTTERDAM.

With reference to the announcement of this competition in the last issue of the JOURNAL, His Majesty's Consul-General at Rotterdam has informed the Department of Overseas Trade that he has received from the Rotterdam municipal authorities a series of 72 questions and answers amplifying and explaining the technical points which arise in connection with the plans.

As a translation would involve considerable time and difficulty His Majesty's Consul-General suggests that any British firm desiring specific information on the subject should communicate with him direct.

THE IMPERIAL LONDON HOTELS, LTD.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

BETHUNE MEMORIAL TO THE MISSING.

The Imperial War Graves Commission desire Members and Licentiates of the Royal Institute to be reminded that applications to take part in the above Competition from persons other than those who had signified their intention of competing on or before 1 January 1924 cannot be considered. Due notice of this regulation was published in the Professional Press on various occasions during August and September, 1923.

MASONIC MEMORIAL COMPETITION.

Apply to The Grand Secretary, Freemasons' Hall, Great Queen Street, W.C.2. Last day for applying for conditions, 23 August 1924. Deposit, £1 1s. Closing date for receiving designs, 1 May 1925. Assessors: Sir Edwin Lutyens, R.A. [*F.*] (appointed by the President); Mr. Walter Cave, [*F.*], Mr. A. Burnett Brown, F.S.I.

MANCHESTER ART GALLERY.

Apply to the Town Clerk, Town Hall, Manchester. Closing date for receiving designs, 20 January 1925. Assessors: Mr. Paul Waterhouse, F.S.A. [*F.*], Professor C. H. Reilly, O.B.E. [*F.*], Mr. Percy S. Worthington, Litt.D., F.S.A. [*F.*].

Members' Column

CHANGES OF ADDRESS.

THE Central New York Chapter, American Institute of Architects, have changed their address to No. 39 State Street, Rochester, New York, care of Mr. John F. Strobel, Secretary.

THE Cambridge University School of Architecture has moved from 75 Trumpington Street to 1 Scroope Terrace, Cambridge (a little south of the Fitzwilliam Museum and beside the Engineering Laboratory). Mr. Theodore Fyfe's offices are now at 1 Scroope Terrace. (Telephone, "237 Cambridge," as before.)

ROOMS TO LET.

STUDENTS.—Rooms to let by architect's widow in W.C. district. Clean and comfortable. Bed and breakfast. Electric light. Bathroom. Well recommended by architects and others.—Reply Box 1425, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

COMMENCEMENT OF PRACTICE.

MR. JOSEPH WILSON [*A.*] has commenced practice at Cockburn Buildings, 141 Bath Street, Glasgow, and will be glad to receive trade catalogues.

MESSRS. MARSHALL WOOD AND HAROLD BURLEIGH have commenced practice at Clock House Chambers, 14 Endwell Road, Bexhill-on-Sea, and at 81 London Road, St. Leonards-on-Sea.

APPOINTMENTS VACANT.

WANTED, a young architect R.I.B.A., good at designs, etc., to assist generally in office in Colombo. Applicants can be seen by arrangement in London. Please apply B. E., c/o R.I.B.A., 9 Conduit Street, W.

WANTED, an experienced architect R.I.B.A., good at designs and planning to superintend a business in the Straits Settlements. Interviews arranged in London. Please apply "Perspective," c/o R.I.B.A., 9 Conduit Street, W.

COUNTRY ARCHITECT wishes to get in touch with trained man who would be willing to undertake tracings and working drawings at short notice at own premises, and also to illustrate articles for architectural and kindred press from time to time. Must be first-rate draughtsmen and fluent sketcher. Reply Box 4533, c/o Secretary R.I.B.A., 9 Conduit Street, W.

THOROUGHLY qualified Architect (member R.I.B.A. preferred) required for South Africa. Must have had experience in general practice and good in design and detail. Able to take responsibility and charge of an office. Must be energetic, healthy, and possess good references. Good prospects and minimum engagement of two years.—Apply Messrs. Bridgman and Bridgman, 1 Palace Avenue, Paignton.

APPOINTMENTS WANTED.

A.R.I.B.A., A.R.C.A. (28), first-class experience in London. At present chief assistant, requires a change of post. Well versed in all branches of work, town-planning, &c. Will do work in own office for any architect who requires help. Apply Box 1024, c/o Secretary R.I.B.A., 9 Conduit Street, W.

LICENTIATE seeks post as architectural assistant. Experienced in designing London banks, offices, factories, &c. Italian style. Special knowledge of steel construction. Qualified as district surveyor. Reply Box 4211, c/o Secretary R.I.B.A., 9 Conduit Street, W.

ASSOCIATE desires appointment in Manchester, experienced in design, detail and working drawings, quantities, specifications, surveying and levelling, or willing to give temporary assistance. Reply Box 3512, c/o Secretary R.I.B.A., 9 Conduit Street, W.

ARCHITECT'S JUNIOR ASSISTANT (Prob. R.I.B.A.) just finished Articles with well-known firm of architects, desires situation Newcastle or Cardiff district preferred. Reply Box 932, c/o Secretary R.I.B.A., 9 Conduit Street, W.

ASSOCIATE R.I.B.A., 31, married, wishes to obtain junior partnership or position with prospects; preferably in London. Has capital, and experience in London and abroad.—Reply Box 1294, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

LICENTIATE, R.A. exhibitor, who was awarded a Diploma of Honour for Architecture by the International Jury of the Franco-British Exhibition and whose designs have been premiated in various competitions, makes a speciality of Domestic work and is open to assist architects at his own office or elsewhere.—Reply Box 4949, c/o Secretary R.I.B.A., 9 Conduit Street, W.1.

ARCHITECT, age 25, five years' experience in all branches of domestic architecture and surveying, desires post as Assistant. Salary £200 per annum. Would consider paying a premium to a good firm with prospects of a junior partnership.—Reply Box 1394, c/o Secretary R.I.B.A., 9 Conduit Street, London, W.1.

COLLABORATOR WANTED.

ARCHITECT, A.R.I.B.A., age 45 years, with 24 years' varied experience as assistant, desires to meet another architect with view to collaborating in work. Just completed a Housing Scheme (162 houses) and lay-out for a model village. Highest references. Reply Box 2573, c/o Secretary R.I.B.A., 9 Conduit Street, W.

PARTNERSHIP.

ARCHITECT and Surveyor, established 40 years in London, desirous of slackening off, will be glad to hear from capable and experienced man with capital (stating amount available) with a view to share in and ultimate acquisition of advertiser's practice. Reply Box 1084, c/o Secretary R.I.B.A., 9 Conduit Street, W.

PARTNERSHIP WANTED.

ARCHITECT (Assoc. R.I.B.A.), 20 years' home and colonial experience, seeks partnership or post with view to above. Reply Box 2031, c/o Secretary R.I.B.A., 9 Conduit Street, W.